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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/836,521	04/17/2001	Dae-Sik Oh	1638	6056
28005	7590	03/09/2006	EXAMINER FOX, BRYAN J	
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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/836,521

Applicant(s)

OH ET AL.

Examiner

Bryan J. Fox

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-5, 7-18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-5, 7-18 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 2, 2005 has been entered.

### ***Claim Objections***

Claim 17 is objected to because of the following informalities: the limitation "the subscriber ID" in lines 16-17 has insufficient antecedent basis. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 8-10, 13-15, 17 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hermansson et al (US005657373A).

Regarding claim 2, Hermansson et al disclose a system where when subscribing, a customer obtains at least two subscriber's cards SIM and the identity numbers of the subscriber's cards SIM can be stored in on element each in one and the same record in

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the subscriber register HLR (see column 4, lines 3-65), which reads on the claimed, "maintaining a subscriber profile that associates multiple subscriber stations with a common subscriber ID." Only one of the two subscriber's cards SIM is activated, i.e. can be addressed when there is incoming traffic to the subscriber (see column 4, lines 3-22), which reads on the claimed, "arranging a first subscriber station of the multiple subscriber stations to respond to a predetermined type of termination signal having the subscriber ID included to identify an intended destination of the termination signal; arranging each remaining subscriber station of the multiple subscriber stations to ignore the predetermined type of termination signal having the subscriber ID included to identify the intended destination of the terminal signal," and, "in response to a request to terminate a predetermined type of communication to the subscriber ID, broadcasting the predetermined type of termination signal having the subscriber ID included to identify the intended destination of the termination signal, whereby only the first subscriber station will respond to the termination signal." However, the subscriber's cards SIM always open the associated mobile terminals to outgoing traffic (see column 4, lines 3-22), which reads on the claimed, "using the subscriber profile to authorize an origination from any of the multiple subscriber stations."

Regarding claim 8, Hermansson et al disclose only one of the two subscriber's cards SIM is activated, i.e. can be addressed when there is incoming traffic to the subscriber (see column 4, lines 3-22), which reads on the claimed, "programming all of the subscriber stations except the first subscriber station to ignore the predetermined type of termination signal."

Regarding claim 9, Hermansson et al disclose only one of the two subscriber's cards SIM is activated, i.e. can be addressed when there is incoming traffic to the subscriber (see column 4, lines 3-22), which reads on the claimed, "programming only the first subscriber station to respond to the predetermined type of termination signal broadcast to the subscriber ID."

Regarding claim 10, Hermansson et al disclose the identity numbers IMSI of the subscriber cards SIM can be stored in one element each in one and the same record in the subscriber register HLR (see column 4, lines 58-65), which reads on the claimed, "the subscriber profile comprises a table having a number of records each corresponding to a respective one of the subscriber stations."

Regarding claim 13, Hermansson et al disclose that the identity numbers IMSI of the subscriber's cards SIM can be stored in one element each and associated with the subscriber's number (see column 4, lines 58-65), which reads on the claimed, "each subscriber station of the plurality of subscriber stations is a mobile station having a respective electronic serial number, wherein the common subscriber ID comprises a mobile identification number, and wherein: maintaining a subscriber profile that associates multiple subscriber stations with the common subscriber ID comprises maintaining a subscriber profile that associates the common MIN with the ESNs of the mobile stations," wherein the IMSI reads on the electronic serial number and the subscriber ID reads on the mobile identification number.

Regarding claim 14, Hermansson et al disclose the use of wireless transmission (see column 3, lines 4-10), which reads on the claimed, "broadcasting the

predetermined type of termination signal comprises sending the predetermined type of termination signal over an air interface.”

Regarding claim 15, Hermansson et al disclose only one of the two subscriber's cards SIM is activated, i.e. can be addressed when there is incoming traffic to the subscriber (see column 4, lines 3-22), which reads on the claimed, “the subscriber ID comprises a telephone number and the predetermined type of communication comprises a telephone call, the method further comprising receiving the request to terminate the predetermined type of communication to the subscriber ID,” wherein a GSM network provides support for the receiving the request.

Regarding claim 17, Hermansson et al disclose a system where when subscribing, a customer obtains at least two subscriber's cards SIM and the identity numbers of the subscriber's cards SIM can be stored in one element each in one and the same record in the subscriber register HLR (see column 4, lines 3-65), which reads on the claimed, “method of facilitating operation of multiple subscriber terminals under a single subscriber account number.” Each SIM card has an IMSI number (see column 4, lines 3-22), which reads on the claimed, “each subscriber terminal has a respective unique serial number.” The identity numbers IMSI of the subscriber's cards SIM can be stored in one element each in one and the same record in the subscriber register HLR (see column 4, lines 58-65), which reads on the claimed, “maintaining a profile authorizing the multiple subscriber terminals.” Only one of the two subscriber's cards SIM is activated, i.e. can be addressed when there is incoming traffic to the subscriber (see column 4, lines 3-22), which reads on the claimed, “arranging a first subscriber

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terminal of the multiple subscriber terminals to respond to a predetermined type of termination signal having the account number included to identify an intended destination of the termination signal; arranging each remaining subscriber terminal of the multiple subscriber terminals to ignore the predetermined type of termination signal having the account number included to identify the intended destination of the terminal signal,” and, “in response to a request to terminate a predetermined type of communication to the subscriber ID, broadcasting the predetermined type of termination signal having the account number included to identify the intended destination of the termination signal, whereby only the first subscriber station will respond to the termination signal.” However, the subscriber’s cards SIM always open the associated mobile terminals to outgoing traffic (see column 4, lines 3-22), which reads on the claimed, “responding to originations from any of the subscriber terminals, wherein an origination carries a unique combination of subscriber account number and serial number and thereby distinguishes the originating subscriber terminal.”

Regarding claim 20, Hermansson et al discloses incoming traffic addressed to the subscriber (see column 4, lines 3-22), which reads on the claimed, “the predetermined type of signal comprises a MIN-based termination signal.”

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 3, 4, 5, 7, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hermansson et al in view of Boltz et al.

Regarding claim 3, Hermansson et al fail to expressly disclose the predetermined type of communication comprises a call directed to the subscriber ID.

In a similar field of endeavor, Boltz et al disclose a system for receiving a call (see Boltz et al column 6, lines 48 – column 7, line 22 and figure 5), which reads on the claimed “the predetermined type of communication comprises a call directed to the subscriber ID.”

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Hermansson et al with Boltz et al to include the above receiving a call in order to have a telephone ready at all times.

Regarding claim 4, Hermansson et al fail to expressly disclose the predetermined type of signal comprises a paging channel message.

In a similar field of endeavor, Boltz et al disclose that the mobile station is paged by the MSC (see Boltz et al column 7, lines 17-22).



It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Hermansson et al with Boltz et al to include the above paging in order to notify the mobile of communications.

Regarding claim 5, Hermansson et al fail to disclose the predetermined type of termination signal comprises a general page message.

In a similar field of endeavor, Boltz et al disclose that the mobile station is paged by the MSC (see Boltz et al column 7, lines 17-22), which reads on the claimed "the predetermined type of termination signal comprises a general page message."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Hermansson et al with Boltz et al to include the above general page message in order to provide efficient communication between the mobile and base stations.

Regarding claim 7, Hermansson et al fail to expressly disclose the predetermined type of termination signal includes at least one parameter indicating that it is the predetermined type of communication signal.

In a similar field of endeavor, Boltz et al disclose that for an incoming call, a mobile station is paged by the MSC/VLR, and in response to page, a radio connection is established therewith (see Boltz et al column 7, lines 19-21), which reads on the claimed "the predetermined type of termination signal includes at least one parameter indicating that it is the predetermined type of termination signal," wherein the mobile must be notified that there is an incoming call for the radio connection to be established.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Hermansson et al with Boltz et al to include the above parameter in order to allow the mobile to respond appropriately.

Regarding claim 11, Hermansson et al fail to expressly disclose receiving a registration message indicating that the first subscriber station is located in a particular location, wherein broadcasting the predetermined type of termination signal comprises broadcasting the predetermined type of termination signal into the particular location.

In a similar field of endeavor, Boltz et al disclose that the mobile perform location updates with the HLR 50 (see Boltz et al column 5, lines 5-60) and that incoming call connections are forwarded to the corresponding MSC (see Boltz et al column 6, line 48 – column 7, line 27 and figure 5), which reads on the claimed “receiving a registration message indicating that the first subscriber station is located in a particular location, wherein broadcasting the predetermined type of termination signal comprises broadcasting the predetermined type of termination signal into the particular location.”

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Hermansson et al with Boltz et al to include the above registration in order to efficiently contact the mobile terminal when necessary.

Regarding claim 12, Hermansson et al fails to expressly disclose in response to the registration message, indicating in the subscriber profile that the first subscriber station is physically located in the particular location; and using the subscriber profile to determine that the predetermined type of termination signal should be broadcast into the particular location.

In a similar field of endeavor, Boltz et al disclose that the location update is stored in the HLR associated with the MSISDN number and particular IMSI number (see Boltz et al column 5, lines 5-60), which reads on the claimed "in response to the registration message, indicating in the subscriber profile that the first subscriber station is physically located in the particular location." When an incoming call is directed at the mobile station, the call is routed to the MSC/VLR serving the active mobile station as specified in the HLR (see Boltz et al column 6, line 48 – column 7, line 27 and figure 5), which reads on the claimed "using the subscriber profile to determine that the predetermined type of termination signal should be broadcast into the particular location."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Hermansson et al with Boltz et al to include the above use of the profile in order to efficiently route calls.

Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hermansson et al in view of Alfred.

Regarding claim 16, Hermansson et al disclose the identity numbers of the subscriber's cards SIM can be stored in one element each in one and the same record in the subscriber register HLR (see column 4, lines 3-65), which reads on the claimed, "each subscriber station has a respective subscriber number, wherein the subscriber profile associates the subscriber ID with the station IDs of the multiple subscriber stations." Hermansson et al fails to expressly disclose in response to an origination

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request that identifies the subscriber ID and a particular station ID, determining that the subscriber profile associates the subscriber ID with the particular station ID.

In a similar field of endeavor, Alfred discloses a system where a profile is accessed for activating a service plan when an outgoing call is made (see column 5, lines 7-24).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Hermansson et al with Alfred to include the above profile use when making an outgoing call in order to apply the correct service plan for the user.

Regarding claim 18, Hermansson et al disclose a system where when subscribing, a customer obtains at least two subscriber's cards SIM and the identity numbers of the subscriber's cards SIM can be stored in one element each in one and the same record in the subscriber register HLR (see column 4, lines 3-65), which reads on the claimed, "communication system of the type having a serving system for serving a plurality of subscriber stations." Each SIM card has an IMSI number (see column 4, lines 3-22), which reads on the claimed, "wherein each subscriber station is associated with a respective station ID and a respective subscriber ID." The identity numbers IMSI of the subscriber's cards SIM can be stored in one element each in one and the same record in the subscriber register HLR (see column 4, lines 58-65), which reads on the claimed, "maintaining a subscriber profile for the given subscriber ID, the subscriber profile associating a plurality of station IDs with the given subscriber ID." Only one of the two subscriber's cards SIM is activated, i.e. can be addressed when there is incoming traffic to the subscriber (see column 4, lines 3-22), which reads on the

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claimed, "a first station ID of the plurality of station IDs is associated with a first subscriber station that is responsive to a termination message having the subscriber ID included to identify the intended destination of the termination message, but wherein each other station ID of the plurality of station IDs is associated with a respective subscriber station that is not responsive to such a termination message, whereby, when the serving system seeks to terminate a call to the given subscriber ID, the serving system broadcasts a termination message having the subscriber ID included to identify the intended destination of the termination message, and the first subscriber station responds to the termination message." However, the subscriber's cards SIM always open the associated mobile terminals to outgoing traffic (see column 4, lines 3-22). Hermansson et al fails to expressly disclose the use of the profile to authenticate outgoing calls.

In a similar field of endeavor, Alfred discloses a system where a profile is accessed for activating a service plan when an outgoing call is made (see column 5, lines 7-24).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Hermansson et al with Alfred to include the above profile use when making an outgoing call in order to apply the correct service plan for the user.

### ***Response to Arguments***

Applicant's arguments with respect to claims 2-5, 7-18 and 20 have been considered but are moot in view of the new ground(s) of rejection.


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan J. Fox whose telephone number is (571) 272-7908. The examiner can normally be reached on Monday through Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bryan Fox  
February 24, 2006

  
JOSEPH FEILD  
SUPERVISORY PATENT EXAMINER